PENTAIR

RAIMONDI

Before installation these instructions must be fully read and understood

These instructions summarise the main warnings concerning the routine operations as per the related Installation and Maintenance Manual.

Section 1 - Valve Storage

1.1 Storage and preservation before installation

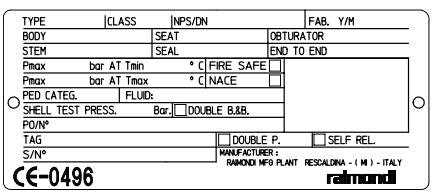
Note

- Storage in an open area for a limited period can be considered only in case the valves have appropriate packing (packed in cases lined with tarred paper, and contents well protected with barrier sacks).
- Do not place consignment packages directly on the ground.
- Do not expose consignment packages to the weather or directly to the sun.
- Check the packaging every two months.

1.2 Handling and/or lifting requirements

Caution

- For valve handling and/or lifting, the lifting equipment (fasteners, hooks, etc.) must be sized and selected while taking into account the valve weight indicated in the packing list and/or delivery note. Lifting and handling must be made only by qualified personnel.
- Do not use the lifting points located on the actuator, if any, to lift the valve. These lifting points are for the actuator only.
- Caution must be taken during the handling to avoid that this equipment passes over the workers or over any other place where a possible fall could cause damage. In any case, the local safety regulations must be respected.



Section 2 - Valve Installation

2.1 Preparation before installation

Warning

- Verify that the direction of the flow in the line corresponds to the arrow indicated on the valve body. Valves without the arrow are bi-directional.
- See the actuator user manual for the actuator preparation (when applicable).
- Verify the assembly of the overpressure relieve device in case of liquid service and double piston effect option.

2.2 Installation

Important

- It is recommended to perform piping flushing before installation of valve. If this is not possible, the valves must be set with the ball in full open position before starting with flushing.
- **For buttweld ends only:**
  To avoid the damage of the soft gaskets, the temperature during the pipe welding and the heat treatment has to be monitored by a thermocouple placed in the seat grease injector holes.
  Make sure to limit the temperature at 200°C maximum.
  This instruction must be carefully followed especially when no transition piece (pup piece) has been welded to the valve.
  The use of a transition piece shall be prescribed, in case the strength of welded pipe is greater than 1,5 times the strength of the valve.

Important

- If piping system is pressurized with water for testing, and in case the piping system has been shut down after testing for a long time, the following recommendations should be adopted:
  a. Use corrosion inhibitor with water to pressurize the piping system,
  b. After testing, the piping system should be depressurized and the test water completely drained.
- For side-entry valves only: do not over torque the bolts to assure gasket tightness. The gaskets are self-energizing.

Section 3 - Valve Maintenance

Warning

- Depressurize the line before starting any maintenance. Failure to do so may cause serious personal injury and/or equipment damage.
- For Stem/Bonnet gasket replacement:
  The stem has been designed as 'antiblow out' to improve the safety during the service.
  This means that the stem cannot be disassembled from the valve by simply removing the valve top flange and bonnet: it is necessary instead to disassemble the valve.

Maintenance of the upper stem on the lantern ring can be performed with pressure in the line, provided that the following steps are respected:

- put the vent valve in "open" position, when the ball is in "open" position
- let the fluid flow from the vent valve, until it stops. When the fluid does not flow anymore, the lantern ring can be removed.

Should the fluid coming out of the vent valve not stop, do not remove the lantern ring. The seat could be damaged. Suspend any dismounting operation, and contact your service department.

Pentair reserves the right to change the contents without notice